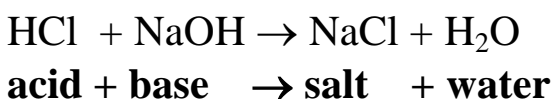


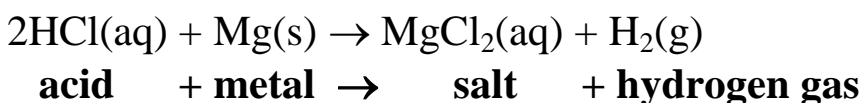
SALTS

SALTS are a class of ionic compounds that can be formed during the reaction of an acid and a base. A salt is made up of a positive ion from a base and a negative ion from an acid. An acid and a base react to form a salt and water in a chemical reaction called a **neutralization (acid-base) reaction**.

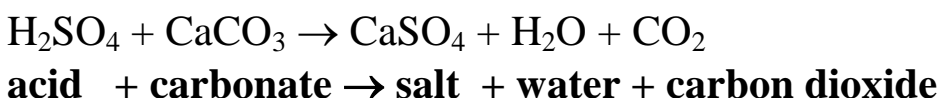


Acids can also react with metals and carbonates to produce salts.

When metals react with acids to produce a salt, they usually release hydrogen gas.



Carbonates can also react with acids to produce salts.



CREATION OF ACIDS AND BASES

Metals and non-metals can react with oxygen to form oxides. An **oxide** is a chemical compound that includes at least one oxygen atom or ion along with one or more other elements. For example, CaO (calcium oxide) and SO₂ (sulphur dioxide).

A **metal-oxide** is a chemical compound that contains a metal chemically combined with oxygen. When a metal oxide dissolves in water, the **solution becomes basic**.



**metal + water → base
oxide**

A **non-metal oxide** is a chemical compound that contains a non-metal chemically combined with oxygen. When non-metal oxides dissolve in water, the **solution becomes acidic**.



**non-metal + water → acid
oxide**

SUMMARY OF ACIDS, BASES AND SALTS:

acid + base → salt + water

acid + metal → salt + hydrogen gas

acid + carbonate → salt + water + carbon dioxide

metal oxide + water → base

non-metal oxide + water → acid